

ABSTRACT OF THE DISCLOSURE

The specification discloses a cardiovascular ostial stents, a ostial stent balloon, and methods for their use. The stent includes two portions having different degrees of expandability. The distal portion has a normal degree of expandability to support a vessel.

- 5 The proximal portion has a higher degree of expandability so that it can be formed into a flange-like structure. The balloon is designed to deploy the new stent in a single operation. The balloon includes first and proximal portions having different diameters corresponding to the first and proximal portions of the stent. The distal portion is of normal diameter to deploy the distal portion of the stent in the vessel. The proximal portion is of greater
- 10 diameter to form the proximal portion of the stent into the flange-like structure. The method involves deploying a conventional stent through one branch of the bifurcation, and then deploying one of the novel stent through a wall of the first stent and into the other branch. The flange-like structure on the novel stent secures the novel stent within the conventional stent. Finally, a one-piece Y-shaped stent is provided for placement in a bifurcated artery.

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